

STATEMENT OF THE CLAIMS

1. (currently amended) A method for extracting packetized data from a SONET/SDH signal, said method comprising:

- a) processing the SONET/SDH signal to provide a deskewed data stream;
- b) demapping the data stream to produce a stream of packets;
- c) storing the packets in a packet buffer; and
- d) monitoring the fullness of the packet buffer, wherein

said demapping is performed at a first rate when the fullness of the buffer is below a fullness threshold, ~~and~~

said demapping is performed at a second rate when the fullness of the buffer is at or above the fullness threshold, and

the first rate is faster than the input rate of the SONET/SDH signal.

2. (cancel)

3. (currently amended) The method according to claim 2 1, wherein:

the second rate is substantially equal to the input rate of the SONET/SDH signal.

4. (original) The method according to claim 3, wherein:

the first rate is substantially the maximum rate of the apparatus used to perform the demapping.

5. (currently amended) An apparatus for extracting packetized data from a SONET/SDH signal, said apparatus comprising:

- a) SONET/SDH signal processing means for processing the SONET/SDH signal to provide a deskewed data stream;
- b) a demapper coupled to said SONET/SDH signal processing means for demapping the data stream to produce a stream of packets;
- c) a packet buffer coupled to said demapper for temporarily storing the packets; and
- d) a fullness monitor coupled to the packet buffer and the demapper for monitoring the fullness of the packet buffer and adjusting the rate of the demapper, wherein

said demapper operates at a first rate when the fullness of the buffer is below a fullness threshold, ~~and~~

said demapper operates at a second rate when the fullness of the buffer is at or above the fullness threshold, and

the first rate is faster than the input rate of the SONET/SDH signal.

6. (cancel)

7. (currently amended) The apparatus according to claim 6 5, wherein:

the second rate is substantially equal to the input rate of the SONET/SDH signal.

8. (original) The apparatus according to claim 7, wherein:

the first rate is substantially the maximum rate of the demapper.

9. (new) The method according to claim 1, further comprising:

- e) storing deskewed data in a deskew buffer, wherein
no backpressure is applied to the deskew buffer.

10. (new) The method according to claim 1, wherein:

- said demapping is performed only at two rates.

11. (new) The apparatus according to claim 5, further comprising:

- e) a deskew buffer coupled to said signal processing means and said demapper, wherein
said signal processing means writes deskewed data to said deskew buffer and said demapper reads deskewed data from said deskew buffer.

12. (new) The apparatus according to claim 5, wherein:

- said demapper operates at only two rates.